AP 203 as a Modular AP

What is It?

- **The modular AP 203 will be a NWI product of the current AP 203 PWI effort**
  - **This effort is examining how to deal with all issues against the current 203 (AKA 10303-203:1994/Cor.2:1998)**
  - **This process will generate TCs, amendments and new editions as necessary**
- **There is a need for a new edition to:**
  - **Incorporate AP interoperability fixes**
    - **This will be done through incorporation of the PDM schema defined modules and current shape AICs or shape modules**
  - **Add CSG**
  - **Add Solid Model History**

PDM modular breakdown

- **Initial Unified PDM schema modules**
    - **product identification**
        - **part identification**
        - **document identification (logical documents, *not* files)**
    - **product version**
        - **part version**
        - **document version**
    - **product definition**
        - **part definition**
        - **document definition**
    - **file identification**
        - **external reference**

PDM schema modular breakdown

- **Initial Unified PDM schema modules**
  - **part structure**
    - **assembly component relationships**
      - **next higher, promissory, specified, quantified**
    - **alternate, substitute, make from, and supplied parts**
    - **part version sequence and hierarchy**
  - **part properties**
    - **cost, mass, descriptive properties (quality, recyclability)**
  - **document structure**
    - **decomposition (assembly component) relationships**
    - **derivation, substitution, and supplied documents**
    - **document version sequence and hierarchy**
  - **document and file properties**
    - **format, content, source, creation, size**

PDM schema modular breakdown

- *Initial Unified PDM schema modules*
  - *general organizational data*
    - persons and organizations
    - dates and times
    - authorization
    - security classification
    - contract
  - work/change management
    - request for engineering action (release, change)
      - recommended solution alternative(s) listed
    - order for engineering action (release, change)
      - in response to specific request(s)
      - selected solution alternative(s) identified

Modular 203 Contents

- product identification
- product version
- product definition
- file identification
- part structure
- part properties
- *general organizational data*
- work/change management
- configuration identification
- configuration effectivity
- assigned effectivity
- foundation representations
- elemental shape
- elemental topological shape

AP 203 Data Contents

- **Modules/AICS for:**
  - **Advanced BREP**
  - **CSG**
  - **Manifold Surface**
  - **Topologically Bound Surface**
  - **Topologically Bound Wireframe**
  - **Geometrically Bound Surface**
  - **Geometrically Bound Surface**

Other Enhancements

- **Closing of all outstanding SEDS (hopefully)**
- **EXPRESS ARM**

- **Other scope changes as required**
  - **More document ability?**
  - **Software CM specializations?**
  - **Non-manifold shape?**
  - **Colour/Layer?**
  - **Annotation of 3D Model?**

Proposed Schedule

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- **Kickoff- Lillehammer**
- **Working Draft- September 1999**
- **NWI/CD- Year End 1999**